

AMENDMENTS TO THE CLAIMS

Listing of the Claims:

1. (Currently amended) A circuit comprising:
a surge suppressing circuit comprising:
a diode connected with an input of the surge suppressing circuit, and
first and second transistors which are arranged as a complementary Darlington pair that is connected in series between the diode and an output of the surge suppressing circuit, and
a resistor connected between the emitter of the first transistor and the base of the second transistor, the resistor having a constant resistance value that does not change with current supplied thereto or temperature of an environment in which the resistor is disposed.
2. (Currently amended) A circuit comprising:
a surge suppressing circuit comprising:
a diode connected with an input of the surge suppressing circuit,
first and second transistors which are arranged as a complementary Darlington pair that is connected in series between the diode and an output of the surge suppressing circuit;
a resistor connected between the emitter of the first transistor and the base of the second transistor, the resistor having a constant resistance value that does not change with current supplied thereto or temperature of an environment in which the resistor is disposed; and
a Zener diode connected between the base of the second transistor and ground, wherein the first and second transistors are maintained in an ON state irrespective as to an amount of current provided thereto, and
wherein the Zener diode is configured to turn on to thereby direct current above a predetermined amount to the ground when a total amount of current provided to the Zener diode is above the predetermined amount.
3. (Canceled).
4. (Canceled).

5. (Currently amended) A circuit as set forth in claim 2, further comprising a wherein the diode which is electrically connected with the emitter of the first transistor.
6. (Original) A circuit as set forth in claim 2, wherein the resistor is connected to a junction between the diode and the emitter of the first transistor.
7. (Previously presented) A circuit as set forth in claim 2, further comprising a capacitor connected between ground and the base of the second transistor and in parallel with the Zener diode.
8. (Currently amended) A method of surge suppression comprising:
connecting a diode with an input of a surge suppression circuit, and
interposing a complementary Darlington pair between the diode and an output of the surge suppressing circuit;
arranging a resistor between the input and a base of the second transistor, the resistor having a constant resistance value that does not change with current supplied thereto or temperature of an environment in which the resistor is disposed; and
connecting the base of the second transistor to ground via a Zener diode provided therebetween,
wherein the complementary Darlington pair is configured by:
using a PNP transistor as the first transistor;
using a NPN transistor as the second transistor; and
connecting the base of the first transistor to the collector of the second transistor,
wherein the first and second transistors are maintained in an ON state irrespective as to an amount of current provided thereto, and
wherein the Zener diode is configured to turn on to thereby direct current above a predetermined amount to the ground when a total amount of current provided to the Zener diode is above the predetermined amount.
9. (Canceled).

10. (Canceled).
11. (Canceled).
12. (Canceled).
13. (Canceled).
14. (Currently amended) A method as set forth in claim [[13]] 8, further comprising connecting a base of a one of the complementary Darlington pair to the Zener diode.
15. (Currently amended) A method as set forth in claim [[11]] 8, wherein the one of the complementary Darlington pair of transistors is a NPN type transistor.